MULTIMEDIA **UNIVERSITY**

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FINAL EXAMINATION

TRIMESTER 3, 2017/2018 SESSION

TIS2151 – WEB APPLICATION DEVELOPMENT
(All sections / Groups)

1 JUNE 2018
9.00 a.m - 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 6 pages with 4 Questions only.

2. Attempt **ALL FOUR** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please print all your answers in the answer booklet for each question answered.

Question 1

a) Fill in the blanks in each of the following statements regarding Internet and WWW:

  • When a user clicks a hyperlink, a _____ locates the requested webpage and sends it to user's web browser.

  • HTML5 is a _____ language designed to specify the content and structure of webpages.

  • Web-based applications are multitier applications. The _____ tier maintains the application's data and typically stores data in a relational database management system.

  • The _____ standard specifies data formats, which programs can use to interpret data correctly.

  [2 marks]

b) An image named "email.png" is 400px wide and 300px high. Write the HTML statements to accomplish the following:

  • Insert the image into a HTML5 document that is in the same folder as the image and decrease the image size by 50%.   [1 mark]

  • Use the image in its original size as a hyperlink that allows the user to compose an email to admin@mmu.edu.my.   [1 mark]

c) Create a table with 1 row, 3 columns and border width of 1px. Insert a table title that says "Personal Details" on top of the table. In the first column insert the text "Email" in bold. Combine the second and third columns into a single cell and insert the text "Home Address" into the cell. The text must be highlighted in yellow.
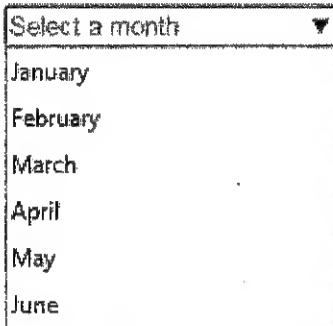
  [3 marks]

d) Write the code to create an HTML form to obtain user's first name, email address and birth month. Set the email field as a required field and place the text "Select a month" as a placeholder in the birth month field. Create a *datalist* element for the birth month (January to June) to enable autocomplete feature for the input field. Specify that the PHP script "insert.php" will process the form data.

First Name: [   ]

Email: [   ]

Birth Month: [Select a month   ▼]
             [January   ]
             [February   ]
             [March   ]
             [April   ]
             [May   ]
             [June   ]

[3 marks]

Question 2

a) Fill in the blanks in each of the following statements related to CSS in HTML5.

    i.   Embedded style sheets enable you to embed an entire CSS3 document in an HTML5 document's _____ section.

    ii.   The _____ property allows you to add rounded corners to any element.

    iii.   An *em* element indicates that its contents should be _____.

[1.5 marks]

b) Explain how external CSS is applied and why is it preferred over inline and embedded CSS.

[1 mark]

c) Write the CSS3 statement/s to achieve the following:

    i.   Set all *em* element that is nested within a paragraph to have an underline.

[1 mark]

    ii.   Define a style class called *multicolumn* that sets the number of column to 3, gap between the column to 30px and column rule that separates the columns to 1px in black.

[1 mark]

    iii.   Set the shadow of *div* element to 25px towards the bottom, 15px towards the left, with blur radius of 30px in purple.

[1 mark]

    iv.   Using inline style, set a paragraph text to be twice larger than the default font size. The content of the paragraph is the word "Paragraph".

[1 mark]

d) Complete the embedded CSS code in the HTML5 code below to do the following:

    i.   Set the background color to *lightblue* and place an image, *logo.jpg* at the bottom right corner of the page.

    ii.   Ensure that the logo stays at the same place when the user scrolls the page.

    iii. Create a style class called *redText* to set the font color to red and bold.

[3.5 marks]

```
<html>
    <head>
        <meta charset = "utf-8">
        <title>Background Image</title>
        <style type = "text/css">
                ........
                ........
                ........
        </style>
    </head>
    <body>

        <p>This page uses CSS rules to place a logo at the
            <span class="redText"> bottom </span> right corner of
            the page.
        </p>
    </body>
</html>
```

Question 3

a) JavaScript is used to enhance the functionality and appearance of a webpage. Fill in the blanks in the following statement (0.5 marks for each answer):

    i. Conditions in *if* statements can be formed using the _____ operators and _____ operators.

    ii. Two ways to pass arguments to functions (or methods) in many programming languages are _____ and _____.

    iii. The window object's _____ method displays a dialog into which the user can type a value.

[2.5 marks]

b) Write a JavaScript code that reads an integer and determines whether it can be divided by 5 or 7. The script should display on the browser whether the integer is divisible by 5 or 7.

[2.5 marks]

c) Write JavaScript statements to print the integers from 25 to 50 using a for loop and the counter variable i. Assume that the variable i has not been declared or initialized. Print only 5 integers per line.

[Hint: use the calculation i%5. When the value of this expression is 0, start a new paragraph.]

[2.5 marks]

d) Write JavaScript statements to sum the values contained in an array named *theArray*. The 10-element integer arrays must first be declared, allocated and initialized (containing values form 1 to 10). The summation of the elements of the array must be done using *for..in* loop. Print the total value on the HTML document using *h1* element.

[2.5 marks]

Question 4

a) What is the main purpose of using wireframe in web design?

[2 marks]

b) Assume that you have created a database *Library* with username "admin" and password "123". Write PHP scripts to do the following:

    i.   Connect to the MySQLi database server and select *Library* database.

[1 marks]

    ii.   Insert the following data into an existing table named *Authors*: First Name: *Aniq*, Last Name: *Fauzi*, Age: *24*.

[1.5 marks]

    iii.   Delete the data inserted in part ii.

[1.5 marks]

c) Write a PHP function called *product* that takes in 2 values and return the product of the 2 values. Write PHP code that calls the function *product* to display the product of 2 and 16.

[2 marks]

d) Write PHP codes for the following:

    i.   Define a *constant* named VALUE with the value 5. Add the constant VALUE to the variable a, and save the result to a variable named *sum*.

[1 mark]

    ii.   Test if variable x is greater than 10. If yes, display "x is greater than 10", otherwise display "x is less than 10".

[1 mark]

End of Page